DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/22/2009 have been fully considered but they are not persuasive.

2. In response to Applicant's first remarks, that '605 fails to teach performing its procedure of "if no black border is found near the expected border location", as applicant asserts, '605 does not check for black borders at all.

However, Allen, '565, is being relied upon to characterize a video signal using a black border, i.e, if no black border is found near the expected border location. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Under the current facts. Schneider teaches a method and system for intelligently controlling a remotely located computer. Schneider teaches detecting at the VPS a new screen resolution of the host computer by creating an interface that provides the following features, "(1) re-programming the CPLD over a JTAG interface; (2) detecting video presence; *(3) detecting video resolution parameters;* (4) initializing the frame buffer; (5) polarizing sync signals; (6) controlling the Video DSP FPGA; (7) resetting the components of the controller 50; and (8) setting the active video parameters." [0069] emphasis added. Schneider teaches various means of adjusting a screen border using

a PLL [0058], using VESA standards [0059-0060], or setting the front porch manually and automated [0062]. Schneider also discussed identify whether the adjusted screen border is near an expected location [0062], with respected to the automated embodiment, the right edge of the screen is used as a reference and counts out the number of pixels in a row, and then determines if the pixel at the end of the row is black or colored. If that pixel is black using the initial front porch value, then the front porch value is shorted and the counting process is repeated. This shorting process is repeated until a non-black pixel is found, i.e. checking for a border [0062]. While Schneider does teach checking to see if a border is found near the expected border location, Schneider fails to expressly teach using a black border; however, Allen also teaches a means to automatically characterize a video signal so as to properly display the video signal (col. 1, lines 7-51). In fig. 5c and discussed in col. 5, lines 53-60, Allen states, "[i]n the embodiment of FIG. 5C, the predetermined characterization image 500 includes a predominantly black area 520 surrounded by a white border 522. *Alternatively, the area 520 may be white, and the border 522 may be black.* The border 522 is one or more pixels in width. The border 522 also assists the display device 102 in determining the extent, or boundaries, of the image conveyed on the video signal 106, so that the display device 102 can properly display the image provided on the video signal 106." *(emphasis added).* It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the border characterization means of Schneider to include the use of a black border as taught by Allen in order to properly categorize the

video signal so the device can optimally display the image conveyed as stated in (col. 1, lines 30-42 of Allen).

Schneider and Allen teach the individual means to optimize the screen resolution, i.e. identify the black border, and loading predetermined values (VESA), Kim discloses wherein an object of the present invention is to provide a method and a system for automatically setting a display mode of a monitor, and a recording medium having a display mode setting program, in which the monitor is optimized by automatically selecting an optimum display mode among a plurality of display modes supported by a video card [0010]. While Schneider and Allen teach the plurality of display modes currently claimed by Applicant Schneider and Allen fail to disclose or suggest the sorting means to determine the optimal screen resolution, (i.e. if no black border is found near to the expected border location, discarding the adjusted screen border and loading a predetermined set of values for the screen border; and if a black border is found near to the expected border location, using the screen resolution of the host computer detected at the VPS instead of discarding the adjusted screen border and loading a predetermined set of values for the screen border.). However, as noted above the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. Examiner asserts the teachings of Kim would have suggested the means of comparing optimum display information of a black

border and VESA, determining the optimum display information and selecting the most approximate to optimum display information (fig. 3 S1-S15 of Kim). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Schneider and Allen to include the optimization method as taught by Kim in order to provide the best or optimal display mode among a plurality of display modes (col. 1-2, lines 55-30 Kim).

In response to applicant's remarks that Kim ('605) teaches using EDID and thus there is no need to perform the checks for the black border. Examiner believes Applicant is attacking the reference (Kim) individually, and while what Applicant asserts maybe true (there being no need to perform the checks for black border with EDID), examiner is relying on Schneider and Allen in view of Kim. Schneider fails to disclose having access to EDID but discloses various means of determining the resolution, performing the checks/optimization of Kim, examiner asserts, would having been obvious to one of ordinary skill in the art, with the motivation being to find an optimal display characteristic between multiple modes.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al (2002/00383334) hereinafter, Schneider in view of Allen et al (7,002,565) hereinafter, Allen in view of Kim et al (2002/0135605) hereinafter Kim.

6. In regards to claim 1, Schneider discloses the limitations of a method of image improvement in a virtual presence architecture (VPA) (fig. 1a (12, 50 and 20a-20c)) including a host computer (fig. 1a (20a-20c)) in communication with a virtual presence server (VPS) (fig. 1a (50)), a remote computer in communication with a virtual presence client (VPC) (fig.1a (12)), the method: on each new screen resolution that is received by a VPS ([0046] and [0025-0027]), comprising:

detecting at the VPS a new screen resolution of the host computer [0069], adjusting a screen border to correspond with the new screen resolution ([0046] and [0061-0067]);

identifying whether the adjusted screen edge is near an expected location [0062];

Schneider differs from the claimed invention in that Schneider does not explicitly disclose using the black border. Examiner notes Schneider teaches in his third embodiment of checking the left and right edges, which could be read as a border.

However, Allen teaches a system and method for characterizing a video signal using a black border (fig. 5c col. 5, lines 53-65).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Schneider to include the use of a black border as taught by Allen in order to properly categorize the video signal so the device can optimally display the image conveyed as stated in (col. 1, lines 30-42 of Allen).

Schneider as modified by Allen fails to expressly teach if no black border is found near to expected border location, discarding the adjusted screen border and loading a predetermined set of values for the screen border;

If a black border is found near to the expected border location, using the screen resolution of the host computer detected at the VPS instead of discarding the adjusted screen border and loading a predetermined set of values for the screen border.

However, Kim teaches a display mode auto-setting method to optimize display modes. (fig. 3 S1-S-15). Examiner notes Kim teaches a means to compare a plurality of display modes and determine optimum display information.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Schneider and Allen to include the optimization method as taught by Kim in order to provide the best or optimal display mode among a plurality of display modes (col. 1-2, lines 55-30 Kim).

Therefore, Schneider and Allen as modified by Kim teaches if no black border (fig. 5c col. 5, lines 53-65 Allen) is found near to expected border location ([0060-0062, and 0064] Schneider), discarding (fig. 3 S5, S7 and S9 Kim) the adjusted screen border and loading a predetermined set of values for the screen border ((fig. 3 S3 Kim);

if a black border (fig. 5c col. 5, lines 53-65 Allen) is found near to the expected border location, using the screen resolution of the host computer detected at the VPS instead (fig. 3 S1 Kim) of discarding the adjusted screen border and loading a predetermined set of values for the screen border (fig. 3 S5, S7 and S9 Kim).

7. In regards to claim 2, Kim discloses the limitations of loading a predetermined value ((fig. 3 S1) Kim).

Schneider teaches a system and method for wherein the predetermined set of values for the screen border is the Video Electronics Standards Association (VESA) set of standard values (table 1 and ([0060] of Schneider).

8. In regards to claim 3, Schneider as modified by Allen and Kim teaches wherein the adjusting is performed by setting a capture engine to move the screen down and to the right ([0061-0064 Schneider] “the right edge of the screen is used as a reference. Thus, the system uses an initial front porch value, counts out the number of pixels in a row, and then determines if the pixel after the end of the row is black or colored”).

9. In regards to claim 4, Schneider as modified by Allen and Kim teaches wherein the user is prompted to manually adjust the screen border to correspond with the new screen resolution ([0062] of Schneider).

10. In regards to claim 5, Schneider as modified by Allen and Kim teaches wherein the VPA automatically adjusts the screen (fig. 1a (12, 50 and 20a-20c) and [0063] of Schneider) border (fig. 5c and col. 3, lines 23-45 of Allen) to correspond with the new screen resolution ([0060-0066] of Schneider).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT D. SITTA whose telephone number is (571)270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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